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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,727	07/26/2001	Ralph J. Locke	CNI-100-C	8203

7590

03/25/2003

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EXAMINER

FULLER, ERIC B

ART UNIT

PAPER NUMBER

1762

DATE MAILED: 03/25/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

09/915,727

LOCKE ET AL.

Examiner

Art Unit

Eric B Fuller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Request for Continued Examination

The request filed on February 25, 2003 for a Continued Examination Application (RCE) under 37 CFR 1.114 based on parent Application No. 09/915727 is acceptable and an RCE has been established. An action on the RCE follows.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 and 13-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "tight" and "well-defined" in the independent claims are relative terms that render the claim indefinite. The terms are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention.

Claims 33-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "rapid cure times" in the independent claim is a relative term that renders the claim indefinite. The term is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 33-35, 37-41, 43, 45, and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Primeaux, II et al.

Primeaux teaches an elastomer coating material for use as an interior lining of rail cars. As the reference is open to all rail cars, the reference reads on rail cars that may carry passengers. The coating material comprises an amine-terminated polyether polyol (column 4, lines 43-45) having a molecular weight greater than about 1500 and an amine equivalent weight greater than about 750 (column 4, lines 43-52) and an isocyanate compound (column 3, line 16). When mixed, these materials react to form a polyurea and cures substantially instantaneously (column 10, lines 13-28). The materials are mixed such that predetermined tensile strength, hardness, and flexibility

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are achieved (column 2, lines 49-67). Since the reference is applying the material to a large substrate such as a rail car and no means are taken to heat or cool the car, the reference reads on applying the material to the substrate at ambient temperatures and pressures. Since the coating taught by Primeaux is the same as the coating claimed by the applicant, and both are applied by spray methods onto similar substrates, it would be inherent that the coating of Primeaux would act to attenuate vibration, noise, and harshness.

As to claim 35, the amine-terminated polyether polyols taught by Primeaux read on polyoxalene polymers. As to claim 41, Primeaux teaches the use of chain extenders (abstract, column 5, line 53). As to claim 43, Primeaux teaches the use of pigments in the material (column 8, lines 26-29). As to claim 45, Primeaux teaches that an organic silane compound may be added in order to increase adhesion of the material (column 9, line 26). As to claim 47, column 3, lines 50-58, and column 8, lines 38-52, show that the isocyanate compound may consist of an isocyanate quasi-prepolymer based on a uretonimine modified MDI and a high molecular weight polyether polyol. The table in column 8 shows that that the isocyanate content in this form is between 0 and 65%. The 2,4'-isomer content should be at least 30% of this. The taught ranges are inclusive of the applicant's claimed ranges.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11, 13-20, 22-29, 36, 42, 44, and 46 are rejected under 35 U.S.C.

103(a) as being unpatentable over Primeaux, II et al. (US 5,962,618).

Primeaux teaches an elastomer coating material for use on a substrate. The coating material comprises an amine-terminated polyether polyol (column 4, lines 43-45) having a molecular weight greater than about 1500 and an amine equivalent weight greater than about 750 (column 4, lines 43-52) and an isocyanate compound (column 3, line 16). When mixed, these materials react to form a polyurea and cures substantially instantaneously (column 10, lines 13-28). The materials are mixed such that predetermined tensile strength, hardness, and flexibility are achieved (column 2, lines 49-67). Since this reference is applying the material to a large substrate such as a rail car and no means are taken to heat or cool the car, this reference reads on applying the material to the substrate at ambient temperatures and pressures. It is the position of the examiner that since the coating taught by Primeaux is the same as the coating claimed by the applicant, it would be inherent that the coating of Primeaux would act to attenuate vibration, noise, and harshness. As to claim 1, the reference fails to teach that the coating is applied in a manner that produces a tight, well-defined application pattern. However, to apply the coating in a tight, well-defined manner would have been obvious at the time the invention was made to a person having ordinary skill in the art.

By doing so, one would control the distribution of the impact resistance property that the coating supplies to the surface of the substrate (column 2, lines 60-65).

As to claims 6 and 7, Primeaux teaches, by way of examples, that the amount of each compound in the material effects the cure time. The examples show cure times as low as less than 10 seconds and as high as 45 second and the compositions that are required for each. It is the Examiner's position that this reference is inclusive of cure times in between 10 and 45 seconds.

As to claims 8, Primeaux teaches to coat the interior of a rail car, which is conventionally made of metal stampings.

As to claim 9, although Primeaux fails to specifically teach that the substrate is a body in white, it is the position of the examiner that it would have been obvious to apply the coating of Primeaux to any substrate that would benefit from having additional abrasion and impact resistance.

As to claims 10 and 11, Primeaux teaches a high pressure, impingement mix spray system (column 8, lines 53-65).

Claim 13 is similar to claim 1, except that the "amine-terminated polymer" of claim 1 is replaced with a "polyoxalene polymer". However, the according to applicant's claim 16, the amine-terminated polyether polyols taught by Primeaux are polyoxalene polymers. Thus this claim is rejected for the reasons stated in claim 1.

As to claims 14 and 42, Primeaux teaches the use of chain extenders (abstract, column 5, line 53). Although Primeaux fails to explicitly teach the addition of fillers to the material, it does teach that fillers are commonly used in similar mixtures to increase

hardness (column 2, line 6). To add fillers to the material taught by Primeaux would have been obvious at the time the invention was made to a person having ordinary skill in the art in order to increase the hardness of the compound.

As to claims 15 and 44, Primeaux teaches the use of pigments in the material (column 8, lines 26-29). Primeaux fails to teach the use of a catalyst, specifically because the reaction and cure times are relatively small all ready. However, one skilled in the art would recognize the addition of a tertiary amine to the material would allow the reaction involving an amine-terminated polymer to occur even faster. The motivation to do so would be to achieve even faster reaction and cure times.

As to claims 16 and 36, Primeaux teaches to use polyether polyols, but is silent on the specific types. However, to use a di-, tri-, quad-, or penta- functional polyether polyol would have been obvious at the time the invention was made to a person having ordinary skill in the art with the reasonable expectation of success.

As to claim 17, column 3, lines 50-58, and column 8, lines 38-52, show that the isocyanate compound may consist of an isocyanate quasi-prepolymer based on a uretonimine modified MDI and a high molecular weight polyether polyol. The table in column 8 shows that that the isocyanate content in this form is between 0 and 65%. The 2,4'-isomer content should be at least 30% of this. The taught ranges are inclusive of the applicant's claimed ranges.

As to claims 18, 19, and 46, an alkylene carbonate is used as a plasticizer in the material (column 4, line 23). To select any of the applicant's claimed plasticizers would have been obvious as they are all alkylene carbonates.

Claim 20 is similar to claims 1 and 13, but adds the limitation of the isocyanate compound having at least one NCO radical that is reactive with the first components. From table 1 and 4, and the examples, Primeaux teaches the use of the NCO radical that is inherently reactive with the first component.

As to claim 22, the average molecular weights given in column 4, lines 25-68, are between 1,000 and 4,000. Applicant's range is inclusive of these values.

As to claim 23, Primeaux teaches that an organic silane compound may be added in order to increase adhesion of the material (column 9, line 26).

Claims 24 and 25 contain limitations that have been previously rejected. These claims are rejected to for the same reasons.

As to claims 26-29, these claims are rejected to for the same reason as claims 16-19.

Claims 21 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Primeaux, II et al. (US 5,962,618) in view of Xiao et al. (US 6,153,709).

As to claim 21 and 30, Primeaux teaches to use aliphatic diamines as the chain extenders. However, Primeaux fails to explicitly teach the material that is the filler. Xiao teaches that talc is a common filler for materials such as these two coatings (column 3, line 18-38). Since, the two references share the same broad constituents and require similar characteristics, one skilled in the art would realize that the the filler in Xiao would impart the same desirable characteristics to the material taught by Primeaux. Therefore, to use talc as a filler for the material taught by Primeaux would have been

obvious at the time the invention was made to a person having ordinary skill in the art in order to control viscosity, rheology, shelf stability, specific gravity, and cured performance properties.

Additionally to claim 30, Primeaux teaches that the amine terminated-polymer can be in the form of a diol (column 4, lines 30-35) with average molecular weights between 1,000 and 3,000. This is inclusive of applicant's "about 2,000".

The limitations of claim 31 have all been previously rejected to in other claims. The claim is therefore rejected to for the same reasons.

As to claim 32, Primeaux teaches that the adhesion promoter may be epoxy alkoxy silane (column 7, lines 45-55).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of U.S. Patent No.

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6,291,019 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the limitations presented in the present claims are met by the claims of the patent. The differences are obvious variants of one another.

Response to Arguments

Applicant argues that the present invention allegedly presents a new method of use for known compounds and therefore inherency is immaterial. The applicant has cited statutory and case law in support. The examiner has considered and acknowledges these arguments and supporting law. However, the argument is found unconvincing. It is the position of the examiner that the applicant has not found a new method of use for the compounds of the present invention. Both the reference and the present invention deal with applying the same coating to the interior of vehicles. Both the compounds in the claims and in the reference are mixed, sprayed on to the substrate at ambient conditions, and allowed to cure. The methods of using the compounds are the same. Therefore, "attenuating vibration, noise, and harshness" is merely an additional benefit to an all ready known process. The courts have decided, "The mere observation of still another beneficial result of an old process cannot form the basis of patentability." *In re Allen et al. v. Coe*. 57 USPQ 136.

Applicant states that the combination of Primeaux in view of Xiao et al., with respect to claims 21 and 30-32, is moot in view of the arguments of Primeaux alone. Applicant additionally notes that the art of record fails to anticipate or make obvious the

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invention of these claims. However, no supporting arguments have been given.

Therefore, the examiner maintains the rejection.

Conclusion

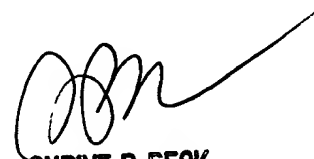
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B Fuller whose telephone number is (703) 308-6544. The examiner can normally be reached on Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached at (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



EBF
March 21, 2003



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